

Appl. No. : 09/385,386
Filed : August 30, 1999

AMENDMENTS TO THE CLAIMS

Please amend Claims 6, 15, 22, 26, 27, 31, 36, 37, 39, 41-45, and 47, and cancel Claims 1-5, 35, 38, and 40. Claims 7-14, 16-21, 23-25, 28-30, 32-34, 46, 48, and 49 remain as previously pending.

- 1.-5. (Cancelled)
6. (Currently Amended) A transfer system comprising:
tubing which is configured to transfer analyte to an ionizer; and
a transfer line in communication with the tubing wherein the transfer line provides a carrier for the analyte, and wherein the transfer line is at an angle of about 30 degrees to about 60 degrees with respect to a portion of the tubing.
7. (Original) The transfer system of Claim 6, wherein the carrier is a gas.
8. (Original) The transfer system of Claim 6, wherein the carrier is argon gas.
9. (Original) The transfer system of Claim 6, wherein the carrier is helium.
10. (Original) The transfer system of Claim 6, wherein the carrier is nitrogen.
11. (Original) The transfer system of Claim 6, wherein the carrier is ammonia.
12. (Original) The transfer system of Claim 6, wherein the transfer line is a gas line.
13. (Original) The transfer system of Claim 6, wherein the transfer line is Teflon tubing.
14. (Original) The transfer system of Claim 6, wherein the transfer line has an inner diameter of 5/32 of an inch.
15. (Currently Amended) A conveyance system comprising:
transfer tubing which is configured to transfer analyte to an ionizer;
a gas line; and
a connector that interconnects a portion of the transfer tubing with the gas line, the connector configured to inject gas into the transfer tubing, wherein the gas line is angled with respect to the connector at an angle that ranges from approximately 30 degrees to approximately 60 degrees.
16. (Original) The conveyance system of Claim 15, wherein the connector is a hole in the transfer tubing that mates with the gas line.

Appl. No. : 09/385,386
Filed : August 30, 1999

17. (Original) The conveyance system of Claim 15, wherein the connector is a compression fitting.

18. (Original) The conveyance system of Claim 15, wherein the connector is welded to the transfer tubing.

19. (Original) The conveyance system of Claim 15, wherein the connector is fusion welded to the transfer tubing.

20. (Original) The conveyance system of Claim 15, wherein the connector is a nipple.

21. (Original) The conveyance system of Claim 15, wherein the connector is a Teflon nipple.

22. (Currently Amended) A transfer system comprising:

connector tubing which is configured to connect to the an input of an ionization system; and

a gas line in communication with the connector tubing, the gas line angled at an angle of about 30 degrees to about 60 degrees relative to the connector tubing, wherein the gas line is configured to inject a gas into the connector tubing.

23. (Original) The transfer system of Claim 22, wherein the connector tubing comprises a first section which is in mechanical communication with the gas line.

24. (Original) The transfer system of Claim 23, wherein the first section comprises polytetrafluoroethylene tubing.

25. (Original) The transfer system of Claim 22, wherein the connector tubing comprises a first section that is configured to connect to a spray chamber.

26. (Currently Amended) The transfer system of Claim 22, wherein the first section comprises perflouroalkoxy (PFA) tubing.

27. (Currently Amended) The transfer system of Claim 25, wherein the connector tubing further comprises a second section that is in communication with the first section, the second section in further communication and with the gas line.

28. (Original) The transfer system of Claim 27, wherein the second section comprises Teflon.

Appl. No. : 09/385,386
Filed : August 30, 1999

29. (Original) The transfer system of Claim 27, wherein the second section is Teflon (PFA) pipe.

30. (Original) The transfer system of Claim 26 further comprising a compression fitting that interconnects the second section with the gas line.

31. (Currently Amended) An ionizer transport system comprising:

tubing that is configured to connect to the an input of an ionization system;

a gas transfer line in mechanical communication with the tubing, wherein the gas transfer line injects a carrier into the connector-tubing; and

a connector that interconnects the tubing with the gas transfer line, wherein the gas transfer line is angled at an angle that ranges between approximately 30 degrees to approximately 60 degrees with respect to the tubing.

32. (Original) The ionizer transport system of Claim 31, wherein the connector is configured to interconnect the gas transfer line at an angle relative to a portion of the tubing.

33. (Original) The ionizer transport system of Claim 31, wherein the connector is configured to interconnect the gas transfer line at a 45-degree angle relative to a portion of the tubing.

34. (Original) The ionizer transport system of Claim 31, wherein the connector is configured to interconnect the gas transfer line at an angle ranging from 30 degrees to 60 degrees relative to a portion of the tubing.

35. (Canceled)

36. (Currently Amended) A method for transferring an aerosol through a transfer line, the method comprising adding a transfer gas to a transfer line at an angle with respect to a portion of the transfer line, wherein the angle is between approximately 30 degrees to approximately 60 degrees.

Appl. No. : 09/385,386
Filed : August 30, 1999

37. (Currently Amended) A method for measuring a sample in a semiconductor processing system, comprising:

converting a sample into an aerosol;
filtering the aerosol;
transferring the filtered aerosol in a transfer tube to an ionizer; and
injecting gas into the transfer tube, wherein the gas is injected at an angle that ranges between about 30 degrees to about 60 degrees relative to a portion of the transfer tube.

38. (Canceled)

39. (Currently Amended) The method of Claim 37, wherein ~~the act of injecting injects the gas is injected at~~ a 45 degree angle relative to a portion of the transfer tubing~~tube~~.

40. (Canceled)

41. (Currently Amended) A method of transferring an analyte comprising supplying a carrier gas an angle that ranges between approximately 30 degrees to approximately 60 degrees with respect to tubing that transfers the analyte from a spray chamber to an ionizer.

42. (Currently Amended) The method of Claim 41, wherein ~~the act of supplying the carrier gas supplies~~ is argon gas.

43. (Currently Amended) The method of Claim 41, wherein ~~the act of supplying the carrier gas supplies~~ is helium gas.

44. (Currently Amended) The method of Claim 41, wherein ~~the act of supplying the carrier gas supplies~~ is nitrogen gas.

45. (Currently Amended) The method of Claim 41, wherein ~~the act of supplying the carrier gas supplies~~ is ammonia gas.

46. (Original) The method of Claim 41 further comprising interconnecting a carrier gas line to the tubing such that the carrier gas line supplies the carrier gas.

Appl. No. : 09/385,386
Filed : August 30, 1999

47. (Currently Amended) A transfer system comprising:
first means for transferring analyte to an ionization system; and
second means for injecting a gas into the first means, wherein the
second means is angled at an angle that ranges between approximately 30
degrees to approximately 60 degrees with respect to the first means.

48. (Original) The transfer system of Claim 47, further comprising a third means for interconnecting the first means with the second means.

49. (Original) The transfer system of Claim 48 wherein the third means interconnects a portion of the first means with a portion of the second means at an angle relative to the portion of the second means.